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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,588	03/29/2005	Klaus Wilczek	ABP 1131-KFM	8998
10037	7590	08/17/2006	EXAMINER	
MILDE & HOFFBERG, LLP 10 BANK STREET SUITE 460 WHITE PLAINS, NY 10606			HOANG, JOHNNY H	
			ART UNIT	PAPER NUMBER
			3747	

DATE MAILED: 08/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/529,588

Applicant(s)

WILCZEK ET AL.

Examiner

Johnny H. Hoang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 March 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 24-67 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 24-67 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 29 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5/16/05.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Inventorship*

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

### ***Claim Rejections - 35 USC § 112***

2. Claims 24-67 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are replete with double recitations, unclear terms, and terms that lack antecedent basis. The following are several examples:

Claims 24-27, line 7, "the idle position" and "the full-throttle position" lack of antecedent basis.

Claims 24-27, line 9, "a pedal angle of between 0<sup>0</sup> and 5<sup>0</sup> to 30<sup>0</sup>" is indefinite.

The claims not specifically mentioned are indefinite since they depended from one of the above claims.

3. Regarding claims 24-67, the phrase "or the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable, and the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 24 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami (US 4,519,361) in view of Mabee et al (US 4,831,985).

Note Figure 1 showing an accelerator pedal (1), an accelerator pedal stroke detector (2), a control signal generator (3), a throttle servo-driver (4), a throttle valve (5), a throttle open-rate detector (6), a throttle close-limit detector (7a), a throttle open-limit detector (7b), a throttle close-limit memory unit (8a), and a throttle open-rate corrector (8b); Note Figure 2 showing a microcomputer (33). Also note specification describes the operation of the throttle control system. Murakami does not disclose producing at least one pulse width modulated output signals with selectable frequencies.

Mabee et al disclose a throttle control system including a pulse width modulator (34) for delivering output pulse with modulated signal to actuator (col. 4, lines 16-20, and col. 5, line 36 through col. 6, line 12).

It would have been an obvious to one of ordinary skill in the art at the time the invention was made to have modified the throttle control system which including a pulse width modulator as taught by Mabee et al into the system of Murakami, since more information is combined and can be processed more precisely at a higher technology facility.

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6. Claims 25-27, 42-45, 48-49, 51-54, 57-58, 60-63 and 66-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami (US 4,519,361) in view of Pfaffenberger et al (U.S. 6,426,619 B1).

Regarding claims 25-27, as discussed in above claimed invention, Murakami does not disclose signal generator including a rotation angle sensor that includes at least one ASIC circuit with a Hall device.

Pfaffenberger et al disclose a pedal with integrated position sensor including a sensor detects rotary motion of the pedal and the magnetic field generated by the magnetic field generator varies with rotation about axis (58), the signal produced by the Hall effect device (72) changes linearly, allowing the position of the pedal to be monitored to be ascertained (col. 4, lines 31-49).

It would have been an obvious to one of ordinary skill in the art at the time the invention was made to have modified the throttle control system which including the a rotation angle sensor that includes at least one ASIC circuit with a Hall device as taught by Pfaffenberger et al into the system of Murakami, in order to assemble in such a manner as to allow it to remain sufficiently accurate and precise during its projected lifetime, since more information is combined and can be processed more precisely at a higher technology facility.

Regarding claims 42-43, 51-52, and 60-61, Pfaffenberger et al further disclose the springs (54) (Figure 1).

Regarding claims 44-45, 48-49, 53-54, 57-58, 62-63, and 66-67, as discussed in claims 25-27.

7. Claims 32-36, 38, 40-41, 47, 50, 56, 59, and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami in view of Mabee et al as rejected claim 24, further in view of Pfaffenberger et al.

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Regarding claims 33-34, the combination of Murakami and Mabee et al teach the claimed invention except the pedal element includes return springs.

Pfaffenberger et al disclose the pedal with integrated position sensor includes the springs (54) for return the pedal element to the idle position (Figure 1).

It would have been an obvious to one of ordinary skill in the art at the time the invention was made to have modified combination of the throttle control system of Murakami and Mabee et al which including the return springs for returning the pedal to the idle position as taught by Pfaffenberger et al, since more information is combined and can be processed more precisely at a higher technology facility.

Regarding claims 35-36, and 40, Pfaffenberger et al further disclose the rotational angle sensor (see rejected claims 25-27).

Regarding claims 32, 38, 41, 47, 50, 56, 59, and 65, as above discussions, the combination does not disclose the range of pedal angle is  $0^{\circ}$ ,  $13^{\circ}$ ,  $22^{\circ}$ ,  $23^{\circ}$ ,  $30^{\circ}$ ,  $35^{\circ}$ , and  $40^{\circ}$ . It would have been obvious to one having ordinary skill in the art at the time the invention was made to, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges or values involves only routine skill in the art. *In re Aller*, 105 USPQ 233 (CCPA 1955).

#### ***Allowable Subject Matter***

8. Claims 28-31, 37, 46, 55, and 64 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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**Conclusion**

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Dawson, Jr. et al (US 6,651,524 B2), Engelgau (US 6,237,565 B1), Byler et al (US 5,241,936), Lundberg (US 4,958,607), and Mitui et al (US 4,919,097).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnny H. Hoang whose telephone number is (571) 272-4843. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephens K. Cronin can be reached on (571) 272-4536. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JHH  
August 4, 2006

Johnny H. Hoang  
Examiner  
Art Unit 3747

  
Andrew M. Dolinar  
Primary Examiner